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Conference Abstract

Engaging Children with Herbarium Specimens at Royal Botanic Gardens Kew's Science Festival

Melissa Bavington ‡

‡ Royal Botanic Gardens Kew, London, United Kingdom

Corresponding author: Melissa Bavington (m.bavington@kew.org)

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Abstract

The Kew and Wakehurst Science Festivals consists of five days of activities over two weekends. Workshops and tours allow visitors to engage with the scientists and their research. We designed an interactive experience, so children could understand what a herbarium sheet is and the process of making one.

The Herbarium accessions an average of 30,000 specimens per year and because specimens need to have a long life and be able to withstand being handled for hundreds of years they need to be 'mounted' according to strict protocols and guidelines. Botanical specimens are vital to research at Kew and beyond, providing key scientific data. Once mounted onto herbarium sheets botanical specimens are added to the Herbarium and made widely available to visiting scientists and researchers. Digitising these specimens increases access further through online portals. To achieve a specimen that can be handled for many years the specimens are mounted onto archival paper, along with their labels, before being added to the collection. There are 6 members in RBG Kew's Specimen Preparation team who work full time to prepare botanical specimens for accession into the Herbarium collection; which currently stands at 7 million specimens and the oldest dates from the 1700s.

We simplified this specimen preparation process down to the basic component parts of paper, glue, plant material and pressing. Using material and tools that visitors would be

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able to find for themselves; art paper, child friendly glue and plant material used in flower crafts we created a hands-on experience for mounting a herbarium specimen.

The Science Festival is now in its 3rd year and each year the activity has been modified based on lessons learned over the course of the festival and each year. The stall is immensely popular going from 300 participants in the first year to over 700 in 2017. In the second year we added a new dimension and allowed visitors to image the specimens they created allowing them to zoom in and see plant parts and structures in further detail to highlight the importance of digitisation. These images can be viewed on the Kew Science Flickr group.

Keywords

Herbarium, botanical specimens, herbarium sheet, engagement, Science Festival, science communication

Presenting author

Melissa Bavington